

either diastereomeric configuration by simply reversing the order of the aryl ortho substitution and metal complexation reactions.

We anticipated that, by analogy to the previously observed ferrocene deprotonations, the source of the diastereoselectivity observed in these reactions should lie in the existence of a preferred rotamer about the benzylic arene carbon bond in which both the X and methyl groups occupy positions anti to the bulky  $\text{Cr}(\text{CO})_3$  unit (4). Difference NOE  $^1\text{H}$  spectra of **1a** provided clearer evidence for this effect. The irradiation of the  $\alpha$ -methyl substituent of **1a** (Figure 1d) caused a 7% NOE enhancement exclusively at the ortho hydrogen that is not removed by *t*-BuLi. Irradiation of the  $\text{Me}_2\text{N}$  group of **1a** (Figure 1e) resulted in 6% and 4% enhancements of the diastereotopic ortho hydrogens, respectively, with the larger effect being evident at the hydrogen which is removed by *t*-BuLi. These results suggest that the preferred conformer of **1a** probably results from a close approach of the benzylic methyl substituent

to the plane of the arene ring, placing the  $\text{Me}_2\text{N}$  group approximately  $60^\circ$  above the plane of the arene in a proximate position to both of the ortho hydrogens (5). The closer proximity of the  $\text{Me}_2\text{N}$  unit to the *pro-S* hydrogen should still account for the selective delivery of the complexed lithium reagent to this site over the alternate *pro-R* hydrogen site. Similar correlations of solution conformational preference as determined by NOE difference spectroscopy can be used to account for the formation of the preferred diastereomers from **1b** and **1c**.

We are continuing our investigations on the steric and electronic influences on the selectivity of these deprotonation reactions and are studying potential applications of these procedures to synthetic problems.

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## Additions and Corrections

Eluvathingal D. Jemmis\* and A. Chandrasekhar Reddy:  
Electronic Structure of Triple-Decker Compounds with  $\text{P}_5$ ,  $\text{P}_6$ ,  $\text{As}_5$ , and  $\text{C}_n\text{H}_n$  as Middle Rings. 1988, 7, 1561.

In the fifth and sixth lines of the first paragraph, " $\text{C}_3\text{B}_2\text{H}_5$ " should be replaced by " $\text{C}_2\text{B}_3\text{H}_5$ ".

Compound number 8 in Table I should be  $\text{CpCo}(\text{C}_2\text{B}_3\text{R}_5)\text{CoCp}$  instead of  $\text{CpCo}(\text{C}_3\text{B}_2\text{R}_5)\text{CoCp}$ .

Reference 9 should include the following: (c) Robinson, W. T.; Grimes, R. N. *Inorg. Chem.* 1975, 14, 3056. (d) Pipal, J. R.; Grimes, R. N. *Inorg. Chem.* 1978, 17, 10.

## Book Reviews

**Organometallic Chemistry Reviews. Journal of Organometallic Chemistry Library 20.** Edited by A. G. Davies, E. O. Fischer, and O. A. Reutov. Elsevier, Amsterdam. 1988. 365 pp. Dfl. 295; \$155.25.

This newest addition to the *Journal of Organometallic Chemistry Library* brings five topical reviews, three of them by Russian authors.

Organic and organometallic carborane chemistry in which the action is at the carbon atoms has been a very active field over the past 25 years. The chemistry thus generated could fill several Gmelin volumes. However, much chemistry can take place at the boron atoms of the  $\text{C}_2\text{B}_{10}$  cage, and the review by Grushin, Bregadze, and Kalinin deals with the interesting area of carboranes containing boron-element bonds. Much of the work reviewed, having been published in Russian in Russian journals, will be unfamiliar to Western readers, and so it is good to have this work summarized in English.

The review on "Pyridine and Quinoline Derivatives of Group

IVB Elements" by Lukevics and Segal is so specialized that it will be of interest to only few of our readers, yet this has been a busy field: 142 pages (423 references) are required to summarize it. The next review by Goldberg, Dirnens, and Lukevics on "Phase Transfer Catalysis in Organosilicon Chemistry" will be of greater general interest considering the diversity of organosilicon reactions that can be facilitated by this approach.

If you are into rhenium, then the chapter by C. E. Holloway, on "Rhenium Carbonyl and Organometallic Compounds. Analysis and Classification of Crystallographic and Structural Data" with its extensive tables and many figures will be of interest and of some use to you. If not, go on to the last chapter, by J. Klapötke and H. Köpf on metallocenedichalcogenolene complexes. This review (in German) includes and extends the topic of metallocenedithiolene chemistry. It is short (22 pages, 59 references) and brings some useful information for those interested in metal complexes of chalcogen ligands.

The main problem with this book is its price: \$155.25 seems rather expensive for a collection of photoreproduced typescripts.

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